751 757 578 184 the customary ways of the people among whom he is working. He knows patches here and there and has a way of jumping from one question rapidly to another, so that the questioned will usually have no difficulty in seeing the ephemeral nature of his interest in the things he has asked about. He and family live in a temple where one of the prayer meetings took place and lasted for three days and nights. His sister told the author that during the nights they (the family) asked them to stop the noise again and again in vain. Now, granted it is very unpleasant to have that amount of noise in the courtyard when one is trying to sleep, the objectors evidently had never given a moment's thought to the possibility that some villagers might decide to go to the missionary's church on a Sunday morning to ask the preacher to stop talking. (The author cannot tell whether the actual asking them to "stop the noise" took the crude form the lady described. The assumption here is that the medical missionary and his family did ask them in some way to stop the noise.)

The author has described the attitude of these three medical persons not with any intention of contempt or even any personal disapproval, but merely by way of showing how some representatives of modern medical science react in a rustic culture. And the matter extends way beyond these three medical practitioners. They show how very little difference there is between such an attitude and the general attitude of missionaries and other religionists towards the traditional ways and doings in any rustic culture in which they are working. The religionist's attitude may be illustrated by the public expression of the husband of the lady doctor in West Town. He and his wife both belong to the "Little Flock" and are the moving spirits of the group. He is a jewel merchant from overseas and speaks fluent English. He expressed himself very strongly in public regarding the epidemic: "If one can trust God (by prayer) and take precautions (medical) at the same time, then all is well and good. If however one has to choose between the two, I trust God and prayers alone." He takes no injection and condemns the local people thus: "What is wrong with the West Town folks is that they do not trust God nor take precautions."

D. The Gods have Answered the Appeal

757 •813 A few days before the last large-scale prayer meeting in Area E took place, rain began to fall. The general temperature suffered a sudden drop. During this prayer meeting the sky remained cloudy and rain was sporadic. From the day after this meeting was over torrential rain fell continuously for a week and the temperature dropped further. As the optimum temperature for choleric bacteria is somewhere around 27°C. and the temperature must not be too far below that when carried from one agent to another, the epidemic was thus over.(14) Another piece of irrefutable evidence of the efficacy of the main body of the traditional ways in dealing with Wen (epidemic) was thus firmly established in the memory of the local people. No local person ever mentioned a word about the drop in temperature and its relation to the behavior of the epidemic, nor was there any great discussion of the efficacy of the prayer meetings, of the taboos on food and on dirt, or of the native prescriptions. Most of these are taken as a matter of course and therefore not matters for reflection. Even the modern injection attracts no more

(14) "The association of high relative humidity with high temperature, accompanied by intermittent rains, forms the most favorable atmosphere for the development of the disease, and the presence of endemic centers from which epidemics may at any time spring, must also be accepted." (Manson's Tropical Diseases, edited by Philip H. Manson-Bahr, 1935, p. 439.) Also, "The bacillus grows best in alkaline media at a temperature of from 30°C. to 40°C. Growth is arrested below 15°C. or above 42°C. A temperature over 50°C. kills the bacillus." (Ibid., p. 440.)

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speculation. As years go by and if the external influence continues its pressure as it does now, an increasing proportion of the local population will undoubtedly take the modern injection, but they will not necessarily withdraw their support from the measures embodied in their ancestral traditions and customs. The modern injection will then, in the minds of the local people, be ranked side by side with the prayer meetings, the many native prescriptions, the food taboos, etc., and be carried out and received in the traditional manner and not in that of the modern ways of science.

As the author travelled back from West Town to Kunming on a truck, he observed that in all towns along the road, and in Kunming itself, which the epidemic touched, prayer meetings similar to those prevalent in West Town took place. This fact shows that at least using prayer meetings to combat the epidemic is not peculiar to West Town.

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All these[1] show that real knowledge is intertwined with false assumptions: but since all these doings are traditionally handed down, the two are not exactly and always distinguishable in the minds of the local folk at all. They show that, should we unconditionally agree with Prof. Malinowski that magic fills the gaps of science, our position will be quite untenable. The distinction between magic and science is a post-industrial product and is not present, the author believes, in most rustic cultures. In a rustic culture, assumptions based upon real knowledge are traditionally defined and built up no less than are assumptions of a magical nature. Both are habitual ways of conduct. In this manner magic, far from necessarily occurring at places where real knowledge is lacking, may indeed exist, flourish and operate side by side with sound scientific knowledge, for attaining the same general aims. This conclusion is made especially obvious when the culture is subjected to external pressure - as in West Town. Here we have a situation in which one line of action is traditionally defined and a mixture of magic and real knowledge, while another line of action is clearly based upon modern science and, as far as the moderns can see, contains no significant false assumptions. Can the new knowledge based upon scientific experiments replace the traditional mixture? The answer has already been given in the facts presented in the foregoing pages: It cannot. First, as we have seen, the use of either magic or real knowledge in the community comes from the same attitude of mind. Second, the traditional attitude which gives sanction to the local practices inevitably requires that when new practices present themselves they be added to the total list if they are not too strange and rejected. The addition is not to replace the old ones but to operate side by side with the others. The attitude behind practices based upon theories of modern medicine, on the other hand, is characterized by a vehement desire to replace the old practices completely. This attitude of mind is incomprehensible to the rustic mind.

Third, the native measures are largely of a communal nature. An examination of the diagram just given will show that the prayer meetings are the center and most other measures taken (such as the taboos on dirt, food, insistence on morals, drinking of "fairy water", etc.) are supplementary to them and form with them a whole conceptual and working system. These communal doings are part of the social organization. They reveal the position of the individual in the community. They bind individuals of the community to one another. They are as important as other communal doings, either religious ones (such as shown in the annual cycle of religious occasions and many others) or social ones (such as the suppression of breach of customs, especially in the sexual domain). That the most literary man of the district (Mr. Chao) had to participate in more than one prayer meeting and yet failed to defend his position when asked by the outsider, that the two carpenters who made the most out of the epidemic had to subscribe very generously to the cause of the prayer meetings, and that the wealthiest family of the locality which had given shape to the modernized hospital and schools should also lend large financial support to these prayer meetings, are all indications of the true weight of the rustic practices. The last case is especially interesting. The family's support of two widely divergent types of institutions at the same time shows that both efforts do not involve a question of principles (whether magic or science) but are means by the traditional pattern to achieve the same social end, namely prestige in the community. That is why, although West Town has been subjected to so much influence from outside, as we have seen in Chapter II of this paper, still the traditional practices remain as firmly entrenched in the minds of the populace as ever.

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The anti-choleric injection and other modern measures of sanitation, on the other hand, are without such root in the community. They have to come in by way of individual adjustments and not by way of communal transformation. It is this fact, the author thinks, which is responsible for the phenomenon that more children than adults have taken the injection. It is this fact also which is responsible for the circumstance that the older people are in directing positions in the prayer meetings. This fact also indicates that the modern injection will have to become another accepted way of doing things (whether it be magic or science as the outside observer conceives of it) in order to come into the community at all. For although individual adjustments may be comparatively easier to effect than a communal transformation, as long as the individual has to live and be a respectable member in the community he or she cannot afford to be indifferent or antagonistic towards the life, work and public affairs of the community. In such a case, individual refusal to participate in the communal undertakings means much more than an individual affair. The individual refuses to participate at the risk of being ostracized for by doing so he is thought to be endangering the entire community.

We have thus in a way reversed Professor Malinowski's position on the relation between magic and science. He took science for granted and conceived of magic as something secondary, to take up the places where science has failed. Professor Malinowski has lived and thought in the scientific era of European civilization, where magic in many spheres of life, such as technology and hygiene, is clearly distinguishable from the main body of knowledge based upon modern science. When we look at the matter from the point of view of the rustic culture the picture is entirely changed. For then science is no longer the general background; the background, usually a mixture of sound knowledge and magic, is cloaked under the local traditions and habits, while the clearly defined scientific ideas and usages from outside will have to struggle for a foothold, taking up the places where the traditional mixture of real knowledge and magic has failed and being woven into this mixture.

There is a further question to be answered. Can we say that, following Malinowski, if some of the practices (such as the prayer meetings) do not seem to have any obvious physical bearing on the epidemic, they nevertheless provide the individual and the community with a means to psychological stability to tide over the crisis? The answer, as the author sees it, is neither in the positive nor in the negative because, after the foregoing analysis, the question does not in fact exist at all. All the practices so far analyzed are traditional ways of meeting life's problems and situations and therefore undifferentiated as regards science or magic. The prayer meetings are as important as the taboos on food. The latter again are as important as one or other of the many medicinal prescriptions or the emphasis on "morale". Very often, to many individuals, all of these are again as important as the drinking of the "fairy water". That this is the characteristic mental attitude may be confirmed without difficulty in other walks of life. At a wedding, for example, the practices which we as investigators brand as magic (such as the custom that the bridegroom must face a certain direction when the bride's sedan chair comes in) exist side by side with others which we as investigators brand as real knowledge (such as the use of a sedan chair to carry the bride, or a particular way of displaying the dowry through the streets). On the Fifth of the Fifth Moon, a festival, each child or adult has some orpiment (As_2S_3) (mixed in water) smeared in earholes, nostrils and other vital parts of the body. This is to ensure that no worms or anything else should penetrate into the body through those openings. At the same time small brushes or mops made of

757 hemp dyed in different colors are hung on the body, to sweep away diseases throughout the coming year. Now, by chemical analysis we know that orpiment has disinfecting properties, and therefore the first practice has a scientific basis; but no science has yet told us the disease-cleaning property of a tiny hemp mop hung on the body. In the treatment of particular diseases we may observe the same thing. In West Town the traditional method of treating skin diseases, like scabies, is the following: (1) The women of the house, with the patient, go to a corner just outside the southern town gate and cook an afternoon meal in the open air. When the meal is ready the eldest woman, leading the patient, makes an offering of food and incense and kowtows with the patient in all directions. Some paper money is burned. Then the women have a meal together with the patient on the spot. (2) Before or after the above ritual the family prepares a kind of mixture consisting of Huang Lien (Coptis teeta, Wall or Radix coptidis, containing Berberin ($C_{20}H_{17}NO_4$)) and lard, and smears it on the sores. The idea behind the offering is that a Ku Nai (goddess) is in control of all cases of the disease and has to be appeased. None of the women of whom the author inquired could give any definite relationship between the medicinal mixture and the offering. Some women simply answered: "Here we also believe in this." (This refers to the medicinal mixture.)

● 813 Now which type of practice provides psychological stability and which does not? Can we say that the prayer meetings provide an emotional outlet for the people more than do the many medicinal prescriptions? Can we say that the direction in which the bridegroom is sitting is of greater psychological importance than the use of the sedan chair? Can we say that the smearing of orpiment on the body on the Fifth of the Fifth Moon comes from a different kind of reasoning than does the carrying of tiny hemp mops on the same occasion? And finally, in the case of the treatment of the skin diseases, can we say that the offering-picnic satisfies the people's spiritual want more than does the particular kind of local therapeutics? Or to put the matter more plainly, is the method of wielding an axe in order to secure fuel for the kitchen any less important psychologically than the matter of putting a string of coins on the main beam (to ensure peacefulness) in the construction of a house (the practice is prevalent in the author's home village in southern Manchuria)? The author fails to see the desired distinctions and must repeat the observation that both the "scientific" acts and the acts based upon false assumptions are traditionally standardized behavior and are hardly distinguishable as one or the other in the minds of the majority of the people. Even in such a crisis as the present epidemic, the West Town populace's attitudes as a whole regarding it and their means to combat it are highly formal. The demand for an explanation from the ordinary folk of the community meets again and again with replies which may be summarized in the following unreflective statement: "When there is Wen (epidemic) we have these prayer meetings. We had prayer meetings on such a scale once before, in the Seventh year of the Republic, when another Wen broke out in our community."

When there is an untraditional happening of momentum such as a bombing or enemy invasion the people may either treat it as a traditional occurrence (the inhabitants of Lu Feng, Yunnan, set up prayer meetings against bombing in the early stages of the Sino-Japanese War[15] or ran into an

(15) The author is indebted for this information to Dr. H. T. Fei, who came across the occurrence while investigating in the area.

absolute panic because they are without means to deal with it.) (The inhabitants of West Town and of the Tali district in general were very much stirred up when Burma fell and a Japanese invasion was imminent in the spring of 1942. Many families began to move further north.) In the latter case the emotional tension is not relieved at all.

The behavior of West Town people and the conduct based upon modern scientific medicine in connection with the epidemic may therefore be summarized in the following diagram (Diagram II). In both types of behavior there is an aim and an expected result. The behavior is the means. In the traditional way, the epidemic is not felt unless deaths have occurred in considerable numbers. Then the epidemic is represented as a simple ailment falling upon the populace as a sort of punishment from the gods for unsatisfactory conduct. There is no effort to differentiate what kind of epidemic it is. And the ways of dealing with it are ready-made and a straight-forward matter - the prayer meetings, the taboos and other doings come by with a minimum of reflective effort or none at all. All these doings present an appearance of spontaneity. Every measure in outline and function is practically understood and known to all adults and is not a matter for dispute or discussion. The expected result is the end of the epidemic.

The way of modern medicine based upon experimental sciences is more complicated. The point of departure is the sudden discovery of a few cases of suspicious symptoms. Then there is an effort to determine the responsible bacteria, with the aid of the microscope. It is then decided that the cause is vibrio cholerae, and their is a sudden alarm of an impending epidemic. Steps to deal with this crisis are then decided upon. After the scientifically determined measures have been meticulously carried out, the modern public health officer may declare that the epidemic will probably end soon.

In either pattern of behavior a medium of the trouble is decided upon, the difference being that in one case the medium is found to be precisely vibrio cholerae, while in the other it is all and any god. In the modern pattern the effort of general cleanliness and prevention of infection is a highly deliberated matter, with the definite view of preventing the transmission of the bacteria. In the local pattern much the same effort is carried out during the crisis for the purpose of pleasing the gods. It is clear then, that the situation is not one of difference between magic on the one hand and science or real knowledge on the other, but one between a certain body of traditionally defined behavior based upon a mixture of knowledge and fantasy, on the one hand, and a certain other body of behavior based upon knowledge and ideas derived from experiments and observations through procedures of modern science, on the other. The first body of behavior has become a part of the indigenous culture, while the second body has just come from outside and is struggling for a foothold.

In the individual cases the traditional behavior pattern is somewhat different. The illness causes a person and his or her family to think in terms of a variety of causes - maybe the patient has displeased the gods; maybe it is his fate; or maybe the illness is simply a bodily trouble; but usually the causes are multiple. No effort, of course, is directed at determining the exact cause, but actions are taken on all known possibilities. Spirits are invoked, medicines taken, finger tips needled to let out blood, "fairy water" is drunk, fortune tellers are consulted, and so forth. Almost anything that presents the slightest suggestion of a cure, whether the information

8/3 comes from a qualified person or not, if the suggestion be not too drastically different from the traditional conceptions, may be accepted. In such a context the modern injection or medicine may be accepted - not through an understanding of the therapeutic principles by the accepting party but simply because it is another unknown power, whether it be magical or scientific.

DIAGRAM II

COMMUNAL (a. the traditional way; b. the scientific way)

Aim	Means		Result
a. Epidemic(to get rid of the Wen that causes many deaths).	Prayer meetings, taboos, etc. (There is no question that the cause is spirits or fate, but this is only understood, not discussed. Certain "cold" food may also be responsible for some individual cases of the illness.)		End of the epidemic
Aim	Means (1)	Means (2)	Result
b. Epidemic (to get rid of it)	What epidemic? (Cholera. The use of the microscope enables man to find out that it is caused by vibrio cholerae which multiply rapidly in optimum temperatures and in suitable media, etc.)	(1) Injection (using fluid containing 8 billion bacteria to the cc), etc. (2) control of transmission of bacteria by flies, water, natural ice, etc. (3) General sanitation, etc.*	The epidemic will end.

* Modern medical authorities think that "the forecasting of cholera epidemics has now become an actual possibility. Based upon statistics which have been subjected to modern scientific analysis, an outbreak of cholera can be predicted two to three months ahead." Manson's Tropical Diseases, edited by Philip H. Manson-Bahr, 1935, pp. 438-439.)

INDIVIDUAL

Aim	Means(1)	Means (2)	Result
a. Individual illness caused by Wen or cholera to be relieved.	Fate, Displeased gods, bodily trouble, accidental.(the various causes are not certain nor clearly defined.)	To invoke spirits, observe taboo on food, etc. Also, Medicine (any) Let open finger tips, Needling, any other means, including injection, drinking "fairy water" etc.	Cure or death
b. Individual attacked by sudden illness of certain symptoms	Infected by the prevalent bacteria.	Hospitalisation of very serious cases. Other cases treated at home. One line of curative effort consistently followed. Stools disposed of, etc., etc.	There is a fair chance of cure.